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Abstract:	The user and developer documentation of the HPC Platform is available in the HPC Platform Guidebook website (https://hbp-hpc-platform.fz-juelich.de) that is also integrated into the HPC Collab in the Collaboratory. This document outlines the structure of this website and describes which information is available where.
Keywords:	User documentation, developer documentation, software, services, guidebook
Available at:	www.humanbrainproject.eu/ec-deliverables

Table of Contents

List of Figures and Tables

1. The Aim of this Document

The aim of this document is to detail the technical and user documentation available to internal and external users of the High Performance Computing Platform, and to provide a roadmap describing plans for future Platform development.

Public release of a preliminary prototype of the High Performance Computing Platform is the subject of a separate Deliverable (D7.7.5 – High Performance Computing Platform v1), to be published simultaneously with this one. The Platform is accessible via the HBP Collaboratory web interface at:

https://collab.humanbrainproject.eu/#/collab/264/nav/1973

2. Technical and User Documentation

The HPC Platform Guidebook contains general information about the HPC Platform and its infrastructure, a collection of user and developer documentation and the Platform training programme. It is available in the HPC Collab or directly at https://hbp-hpc-platform.fz-juelich.de.

The Guidebook website is structured as follows:

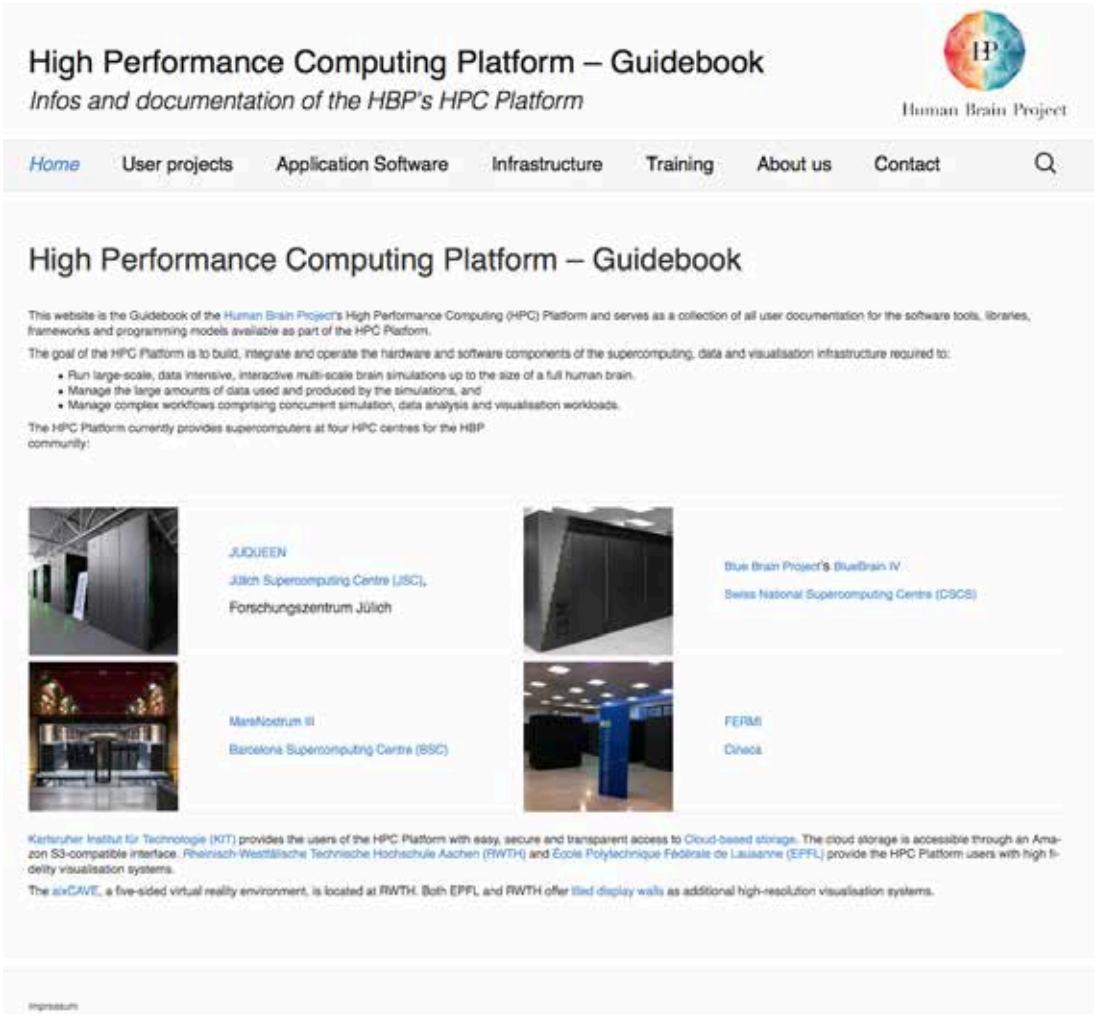

Figure 1: Screenshot of the HPC Platform Guidebook's start page

User projects

User projects are collaborations between the HPC Platform and scientists from one or more other HBP Subprojects. They serve as examples of how the HPC Platform can be used for neuroscientific research. The initial set of three user projects will be extended in the future.

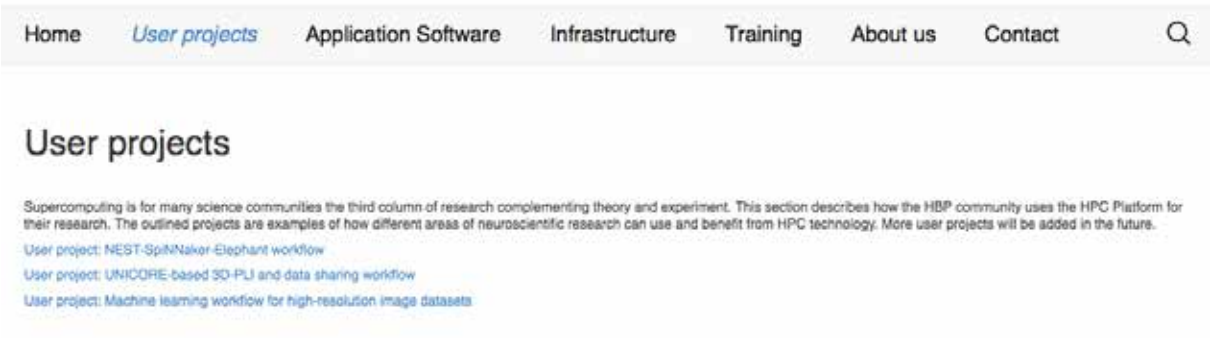

Figure 2: Screenshot of the "User projects" section

Application Software

The section “Application Software” contains a list of all software available as part of the “Software & Services” layer of the HPC Platform as outlined in the Month 30 Deliverable D7.7.5, Annex A: Platform Architectural Diagram.

The following information is provided for all software:

- Description of the software including screenshots, figures and information about recent updates
- Date of release, latest version of software and documentation
- Link to software repository or download URL
- Link to the user documentation
- Responsible person or group, WP, Task and related SP7 Milestones
- Requirements and dependencies
- Target systems
- Type of software, e.g. API, library, application or programming model
- Target users
- Tags and keywords

The section also provides a search mechanism that allows the user to find software based on the different types of information listed above.

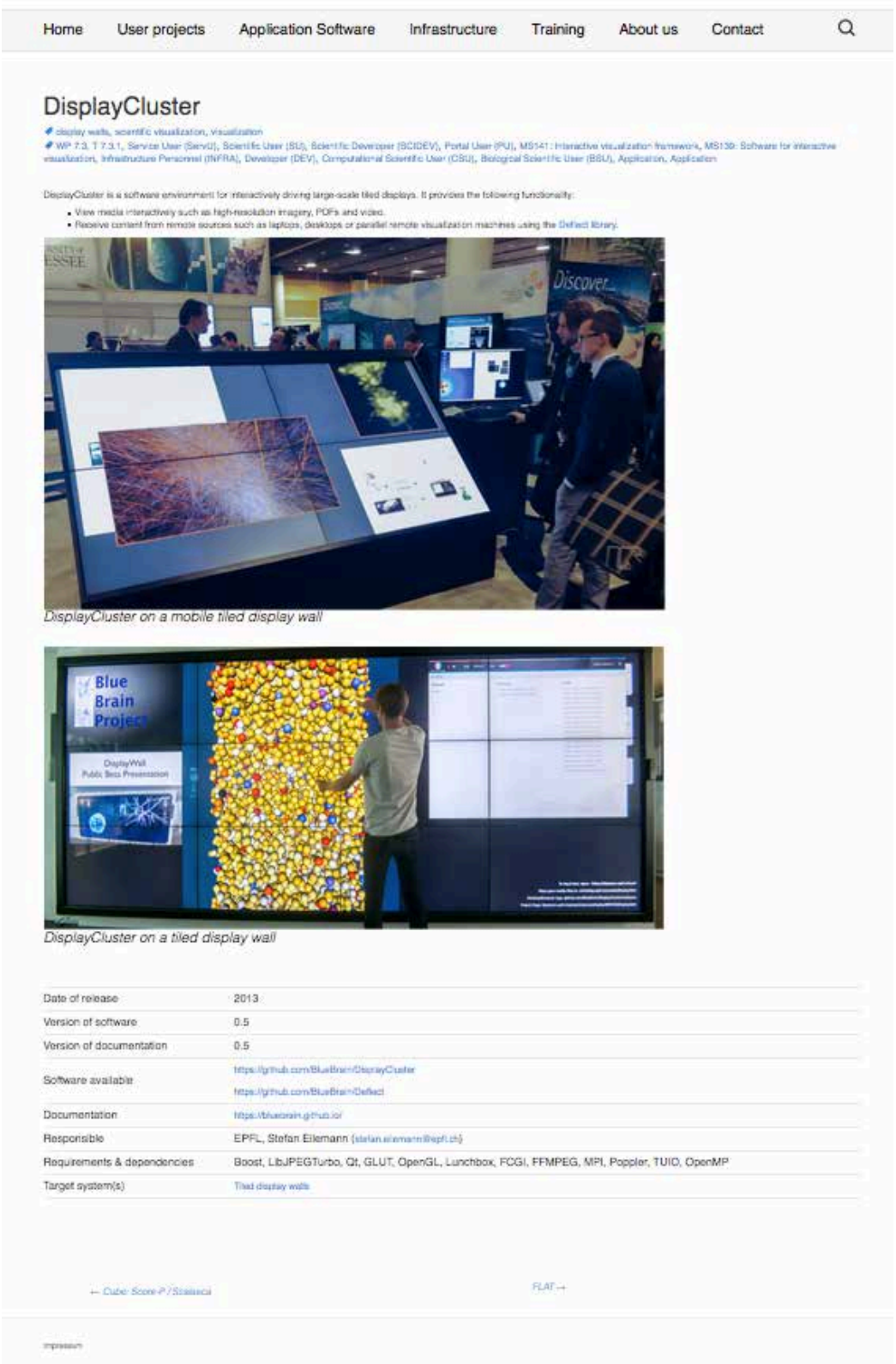

Figure 3: Screenshot: Example of a software page

Infrastructure

The “Infrastructure” section has the following structure:

- Supercomputers
  - Supercomputers available
    Technical details of the supercomputers integrated in the HPC Platform
    - JUQUEEN
    - BlueBrain IV
    - MareNostrum III
    - FERMI
  - Access to Supercomputers
    Supercomputers are limited resources shared by several communities. Thus scientists need to apply for compute and storage resources in a competitive process. Applications are evaluated in a scientific and technical peer-review to ensure a fair distribution of resources. Also users of the HPC Platform need to apply for compute and storage resources in advance.
    This section provides information about all calls for proposals available, about how to get test accounts and preparatory access.
    - Access to JUQUEEN
    - Access to BlueBrain IV
    - Access to MareNostrum III
    - Access to FERMI
  - HPC Storage
    Information about the file systems available at the HPC centres, including user/group/project quota.
  - Working with supercomputers
    Guide explaining the usual workflow of how to start using HPC including the porting of applications to supercomputers
- Cloud storage
  Technical details of the Cloud storage provided by KIT
- Visualisation systems
  Technical details of the high-fidelity visualisation systems at RWTH Aachen and EPFL
  - Booking request for visualisation systems
    Contact form that allows users to send a request for using the visualisation systems
- Network
  Technical details of the networks (PRACE, dedicated links and public Internet) linking the HPC sites, the Cloud at KIT and the visualisation sites
- Platform configuration
  Developer documentation of the HPC Platform
  - UNICORE
    UNICORE is used to logically link the federated infrastructure of the HPC Platform.

- UNICORE installation
  Technical details of the UNICORE installation at the HPC Platform sites
- UNICORE Portal
  Information about the UNICORE Portal, a web interface to HPC resources that is part of the HPC Collab
- UNICORE Workflow Engine
  Information about the UNICORE workflow engine that can be used to control the execution of multiple UNICORE jobs at one or at multiple sites, dealing with dependencies between jobs and handling any of required data movement.

- User & group management
  Account management of HPC Platform user accounts
  - Naming scheme for users and groups
    Definition of the naming scheme for HPC Platform user accounts
  - Accounting library
    Link to technical details of the accounting scripts used at JUELICH-JSC for managing the HPC Platform user accounts

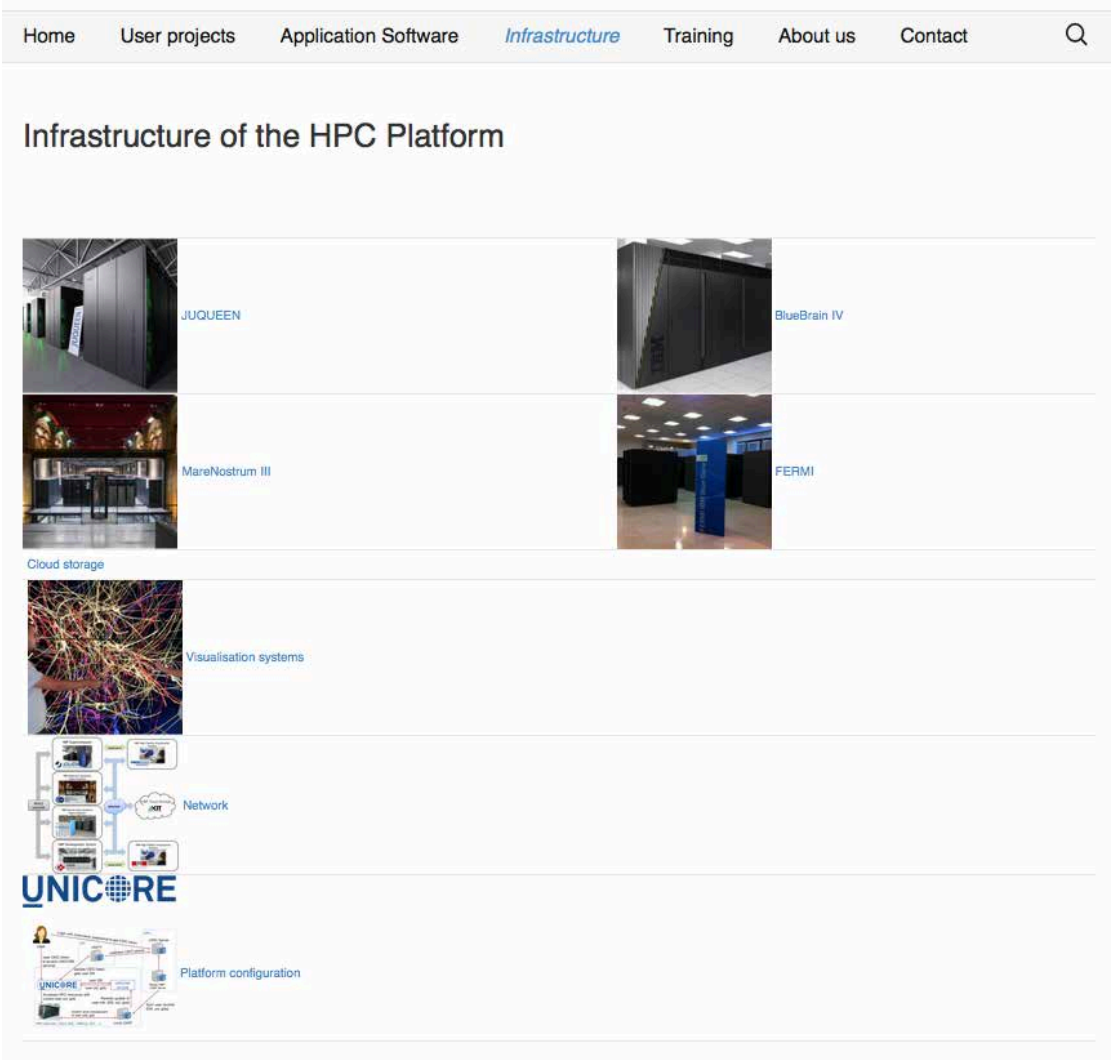

Figure 4: Screenshot of the "Infrastructure" section

Training

This section provides information about the training and course programme of the HPC Platform that mainly consists of courses and workshops organised by the SP7 partners.

- Training courses
  An event calendar with all courses and workshops, sorted by different categories like software development, HPC, visualisation and schools for students
- Online training
  A collection of trainings and material provided online by the SP7 partners
- SP7 partners' courses
  A collection of links to the training websites of the SP7 partners
- HBP Education Programme
  Link to the HBP Education Programme
- Training request
  A contact form offered for the HPC Platform users to provide feedback on the training programme and to request additional training and support

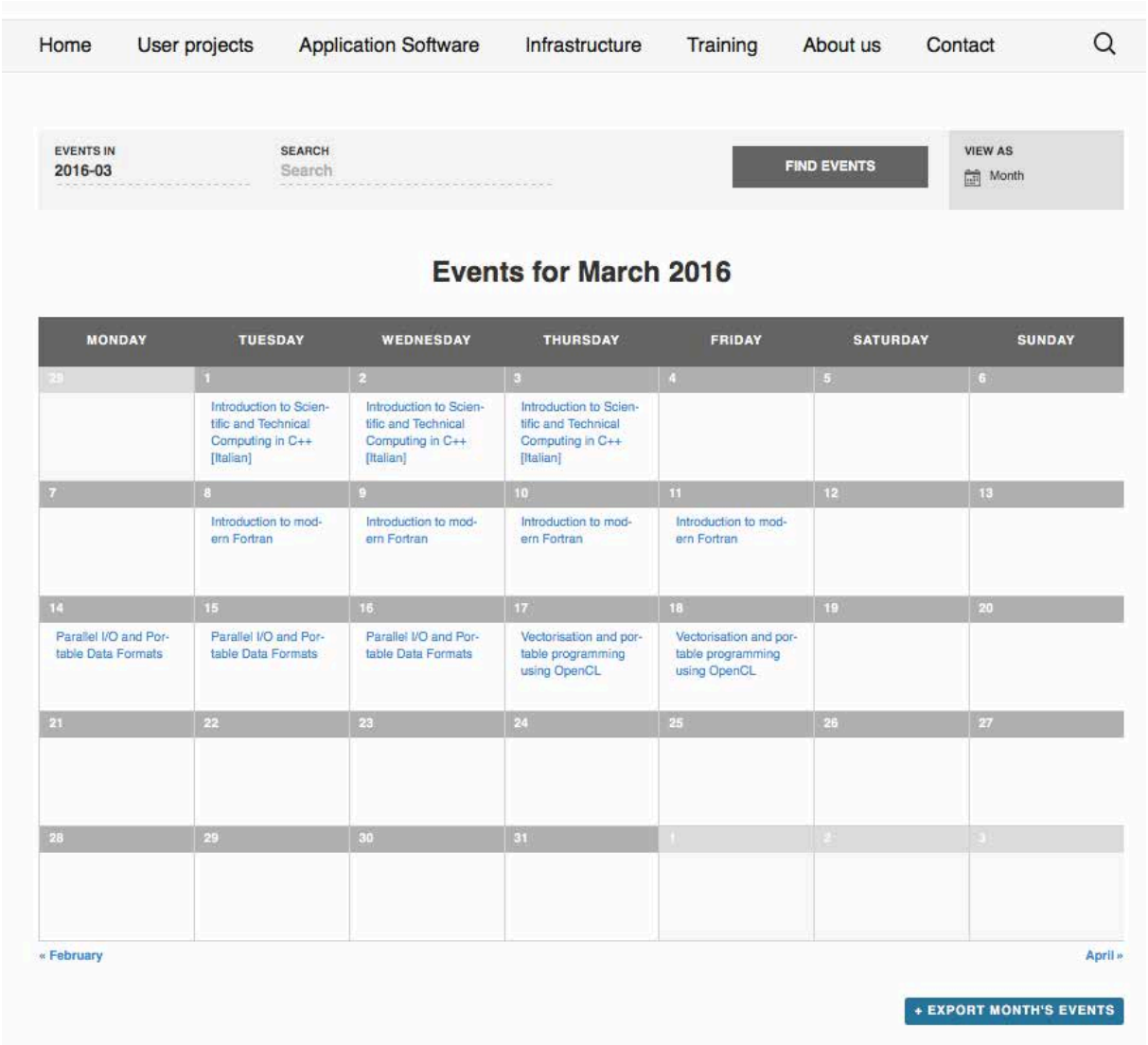

Figure 5: Screenshot of the Training Event Calendar

About us

This section provides an overview of the HPC Platform partners.

Figure 6: Screenshot of the "About us" page

Contact

This page contains contact information and a contact form for HPC Platform users. The HPC Platform Management Team at Forschungszentrum Jülich answers all requests or forwards them to the relevant experts. A support team will be established and take over this role at the beginning of SGA1.

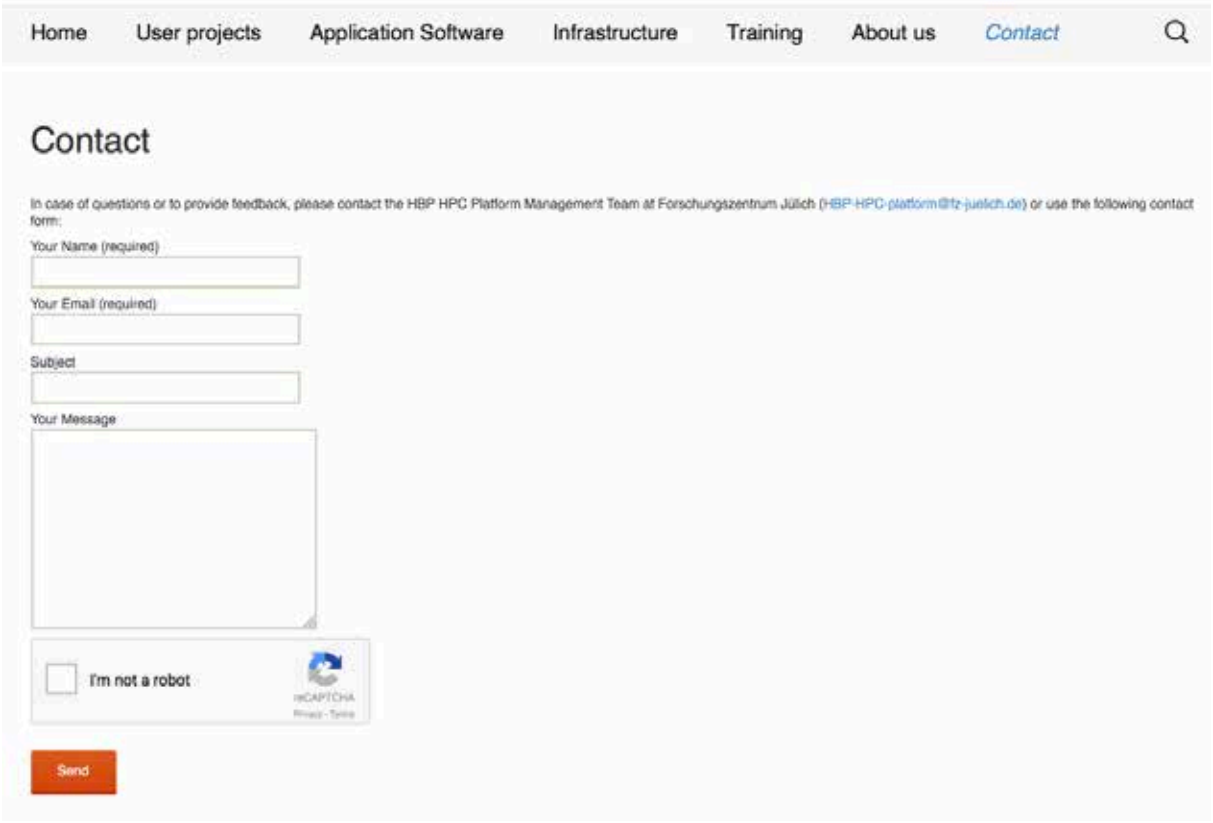

Figure 7: Screenshot of the contact page

3. Support and User Feedback

To obtain user assistance, to provide user feedback or to contribute to the on-going development of the platform, please contact: HBP-HPC-platform@fz-juelich.de

You can also use the contact form available on the HPC Platform Guidebook: https://hbp-hpc-platform.fz-juelich.de/?page_id=152

4. Future Development of the Platform

Future development of the Platform is covered in the Month 30 Deliverable D7.7.5, Annex F: Backlog (remaining bugs and new features to be added).